

SPARC Water Vapour Assessment

Direct comparisons cluster within a 10% range in middle and upper stratosphere, with over 20% differences not uncommon in the lower stratosphere.

Extreme range of direct comparisons exceeds 30%.

Indirect comparisons differ by as much as 50%.

(Figure 2.73 from WAVAS 2000)

Largest % differences at the levels of smallest water vapor content.

Points to consider (possibly for the discussion session):

Absolute accuracy

Important when considering microphysical processes

Continuation of trends

From HALOE, although SAGE & POAM should be considered as well

Spatial distributions

Are differences from correlative measurements a function of latitude/altitude/longitude/surface type?

Proximity for validation

How close (in space and time) does a correlative measurement need to be to use for validation?